

10/633,323

**REMARKS**

The drawings are amended, per the attached Submission, to overcome a few noted informalities contained therein. **New formal drawings, incorporating the requested amendments, are enclosed.**

Claims 39-41, 44-46, 48-57, 59, 65-74 and 76-66 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for the reasons noted in the official action. The rejected claims are accordingly amended, by the above claim amendments, and the presently pending claims are now believed to particularly point out and distinctly claim the subject matter regarded as the invention, thereby overcoming all of the raised § 112, second paragraph, rejections.

The Applicant notes in regards to the raised § 112, second paragraph issue with respect to paragraph 6) on page 3 of the official action, at least Fig. 8 of the Applicant's specification discloses the output shaft connected with the spider of the second planetary gear set.

Claims 39-40, 55, 66, 68-71 and 74 are rejected, under 35 U.S.C. § 102(e), as being anticipated by Martyka `370. The Applicant acknowledges and respectfully traverses the raised anticipatory rejection in view of the following remarks.

As the Examiner is aware, to support a rejection under § 102(e), the reference must suggest, teach or disclose every feature of the present invention as recited in the rejected claims. Presently, Martyka `370 discloses a seven speed automatic transmission and the corresponding shifting elements of Martyka `370 relative to the presently claimed invention are shown in the table below.

	clutch			brake		
Present Application	B	E		A	C	D
Martyka `370	34	36	38	32	40	42

Martyka '370 actually teaches a clutch arrangement very different from the presently claimed invention. First, to obtain the seven speed transmission, besides a first a second clutches 34 and 36, which are separated by the first planetary gearset 26, an additional third clutch "38" is positioned on a common disc carrier with clutch 34. This additional clutch creates a completely different clutch configuration for gear ratio selection throughout the seven speed

transmission disclosed by Martyka '370. Furthermore, the clutches 34 and 36 of Martyka '370 which are axially arranged on different sides of the first planetary gearset, again creating a drastically different, and axially longer transmission which if anything teaches away from the principle of the present invention which is to provide as axially compact a transmission as possible. As is well known by those of ordinary skill in the transmission art, such changes in clutch configuration and/or arrangement result in a significant change in both structure and function of the transmission.

As noted in the specification and shown in the Figures of the Application, it is the specific purpose of the Applicant's claimed arrangement to create as functional and compact a transmission as possible with regards to the axial length of the transmission. As described at least at paragraph 014 of the Applicant's specification,

In accord with the invention, the third and the fourth shifting element, when spatially observed, are placed radially over one another and the fifth and the second shifting element, in their spatial relationship, are also radially over one another. In this way, when compared to the state of the technology as set forth in DE 199 12 480 A1, a clearly more compact transmission construction is achieved with an advantageously shorter installation length.

Be that as it may, Martyka '370 fails to disclose each and every limitation of the presently claimed invention. With respect to claim 39, the Applicant has amended the claims to more clearly differentiate the present invention from the cited reference. In particular the Applicant has amended to the claim to recite that each of the claimed planetary gear sets are immediately adjacent one another ". . .said three planetary gear sets (RS1, RS2, RS3) are aligned coaxially *and immediately adjacent* to one another. . .". This is clearly not the case in Martyka '370 where the second shifting element 36 is shown interspaced between the first and second planetary gears 26 and 28.

The Examiner contends that Martyka '370 discloses the third and fourth shifting elements, 40 and 42 respectively, placed radially above one another. Similarly, the Examiner also contends that the second and fifth shifting elements, 34 and 36 respectively, are placed radially above one another. The Applicant respectfully disagrees with the Examiner's

assessment of the reference in that Martyka '370 arguably discloses the shifting elements 40, 42 at different radial distances from the center of rotation, however these shifting elements are expressly shown axially spaced from one another and are not radially above one another.

Fig. 1 of the applied reference also fails to show that either the second and fifth 34, 36, nor the third and fourth 40, 42 shifting elements are, "... placed radially *above* one another" as recited in Applicant's claim 39. In other words, in the Applicant's invention the fifth and second (B) and (E) shifting elements, as well as the third and fourth shifting elements (C) and (D) are positioned essentially directly above one another, or in other words, the respective shifting elements are radially above one another, but perhaps more importantly in regards to the compactness of the Applicant's transmission, are also axially aligned. In order to clarify this structure the Applicant has also amended claim 39 to include the feature "wherein the third and the fourth shifting element (C, D), seen spatially, are *substantially axially aligned* and placed radially above one another and in that the fifth (E) and the second (B) shifting element, seen spatially, are *substantially axially aligned* and placed radially above one another."

According to the Applicant's description and readily apparent in Fig. 3 of the Applicant's presently claimed invention, the third (C) and fourth (D) shifting elements are radially aligned above one another, i.e., axially aligned, which is in accordance with at least one of the important aspects of the present invention which is to reduce the axial length of the transmission. This is particularly different from Martyka '370 which discloses that the shifting elements 40, 42 are not only axially spaced from one another, but disclose the shifting element 36 between the first and second planetary gears 26, 28.

Accordingly as Martyka '370 fails to disclose, teach or suggest a multi-stage automatic transmission, "... wherein the third and the fourth shifting element (C, D), seen spatially, are *substantially axially aligned* and placed radially above one another and in that the fifth (E) and the second (B) shifting element, seen spatially, are *substantially axially aligned* and placed radially above one another", the Applicant now believes that claim 39 is allowable. Because the remaining claims rejected under the Martyka '370 reference are dependent either directly or indirectly on claim 39, the Applicant believes that they are allowable as well.

Claims 39, 57, 72-73 and 76-77 are rejected, under 35 U.S.C. § 102(e), as being anticipated by Kao `160. The Applicant acknowledges and respectfully traverses the raised anticipatory rejection in view of the following remarks.

In Fig. 1, Kao `160 discloses a six speed automatic transmission having a similar transmission schematic as Applicant's prior German patent DE `480. Below are the corresponding shifting elements of Kao `160 and the presently claimed invention.

	clutch		brake		
Present Application	B	E	A	C	D
Kao `160	52	50	54	58	56

Similar to the previously analyzed Martyka '370 reference, Kao '160 discloses yet another clutch arrangement, and a very different clutch arrangement from the Applicant's presently claimed invention. Specifically, Kao `160 teaches a clutch arrangement where the Applicant's elements (B/E) equate to elements 52/50 in Kao `160 which are positioned axially between the planetary gear sets 40 and 30. Thus, as discussed above Kao `160 fails to disclose teach or suggest the Applicant's specifically recited feature of "...three planetary gear sets (RS1, RS2, RS3) are aligned coaxially *and immediately adjacent* to one another..." as set forth in claim 39.

Furthermore, the spatial relationship of the elements 50, 52 in Kao '160 also fail to disclose each and every limitation of the rejected claims, specifically "the third and the fourth shifting element (C, D), seen spatially, are *substantially axially aligned* and placed radially above one another and in that the fifth (E) and the second (B) shifting element, seen spatially, are substantially axially aligned and placed radially above one another" as claimed in the Applicant's independent claim 39. As in the previous reference, it may be argued that Kao '160 discloses a radially spaced second 52 and fifth 50 shifting element, but these elements are not radially above one another as claimed, nor "substantially axially aligned" as currently recited in claim 39.

Therefore, for similar reasons to that as discussed in regards to Martyka '370, the Applicant reiterates that Kao '160 fails to disclose a multi-stage automatic transmission

“...wherein the third and the fourth shifting element (C, D), seen spatially, are substantially axially aligned and placed radially above one another and in that the fifth (E) and the second (B) shifting element, seen spatially, are substantially axially aligned and placed radially above one another” as recited in the Applicant’s independent claim 39. The Applicant now believes that claim 39 is allowable. Because the remaining claims rejected under the Kao ‘160 reference are dependent either directly or indirectly on claim 39, the Applicant believes that they are allowable as well.

Claims 39, 45-46, 48-51, 53-56, 59 and 65 are rejected, under 35 U.S.C. § 102(e), as being anticipated by Tiesler ‘740. The Applicant acknowledges and respectfully traverses the raised anticipatory rejection in view of the following remarks.

The Applicant is thoroughly familiar with Tiesler ‘740 as the Applicant of this reference, and thus has first hand knowledge of the differences between the reference and the Applicant’s presently claimed invention. Tiesler ‘740 fails to disclose each and every limitation of the rejected claims, specifically “the third and the fourth shifting element (C, D), seen spatially, are substantially axially aligned and placed radially above one another and in that the fifth (E) and the second (B) shifting element, seen spatially, are substantially axially aligned and placed radially above one another” as claimed in the Applicant’s independent claim 39. It may be argued that Tiesler ‘740 discloses a second (B) and fifth (E) shifting element placed at least partially radially above one another. However, it is clear from observing any of the Figures, and in particular Fig. 14 of Tiesler ‘740, the third (C) and fourth (D) shifting elements are, not radially above one another. Furthermore, the third (C) and fourth (D) shifting elements are clearly situated at two axially separate locations in the transmission housing.

Tiesler ‘740 thus fails to disclose a multi-stage automatic transmission “wherein the third and the fourth shifting element (C, D), seen spatially, are substantially axially aligned and placed radially above one another and in that the fifth (E) and the second (B) shifting element, seen spatially, are substantially axially aligned and placed radially above one another”. as recited in the Applicant’s independent claim 39. Because the remaining claims rejected under the Tiesler ‘740 reference are dependent either directly or indirectly on claim 39, the Applicant believes that they are allowable as well.

10/633,323

Further in regards to Tiesler `740, the Applicant points out that the specification of the present invention was received in the office of the undersigned Attorney's of Record in the United States on July 25, 2003 which is prior to the filing date of July 31, 2003 of Tiesler `740. Thus, if necessary an appropriate affidavit under 35 U.S.C. §§ 1.132 or 1.131 can be filed to overcome the cited Tiesler `740 if need be. However, as Tiesler fails to disclose teach or suggest at least the above noted feature of the presently claimed invention, no such affidavit is currently necessary and thus the Applicant respectfully requests withdrawal of the anticipation rejection.

Claims 41, 44 and 67 are rejected, under 35 U.S.C. § 103(a), as being unpatentable over Martyka `370 as applied to claims 39 and 66 and further in view of Neumann `895, and claims 50-51 are rejected, under 35 U.S.C. § 103(a), as being unpatentable over Martyka `370 as applied to claim 39 and further in view of Michioka `088. As these claims are dependent either directly or indirectly upon claim 39 which is believed allowable in view of the above amendments and remarks, the Applicant believes these claims to be allowable as well.

The Applicant thanks the Examiner for indicating that claim 52 is objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form to include all of the limitations of the base claim. In accordance with this indication, the subject matter of claim 52 is added to the subject matter of previous claim 39 as new claim 78 which is now believed to be allowable.

If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

In view of the above amendments and remarks, it is respectfully submitted that all of the raised rejections should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejection(s) or applicability of the Martyka `370, Kao `160, Tiesler `740, Neumann `895 and Michioka `088 references, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the

10/633,323

applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejection(s) should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

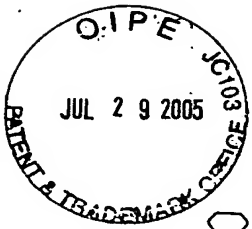
The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,



Scott A. Daniels, Reg. No. 42,462  
**Customer No. 020210**  
Davis & Bujold, P.L.L.C.  
Fourth Floor  
500 North Commercial Street  
Manchester NH 03101-1151  
Telephone 603-624-9220  
Facsimile 603-624-9229  
E-mail: [patent@davisandbujold.com](mailto:patent@davisandbujold.com)



1 / 10

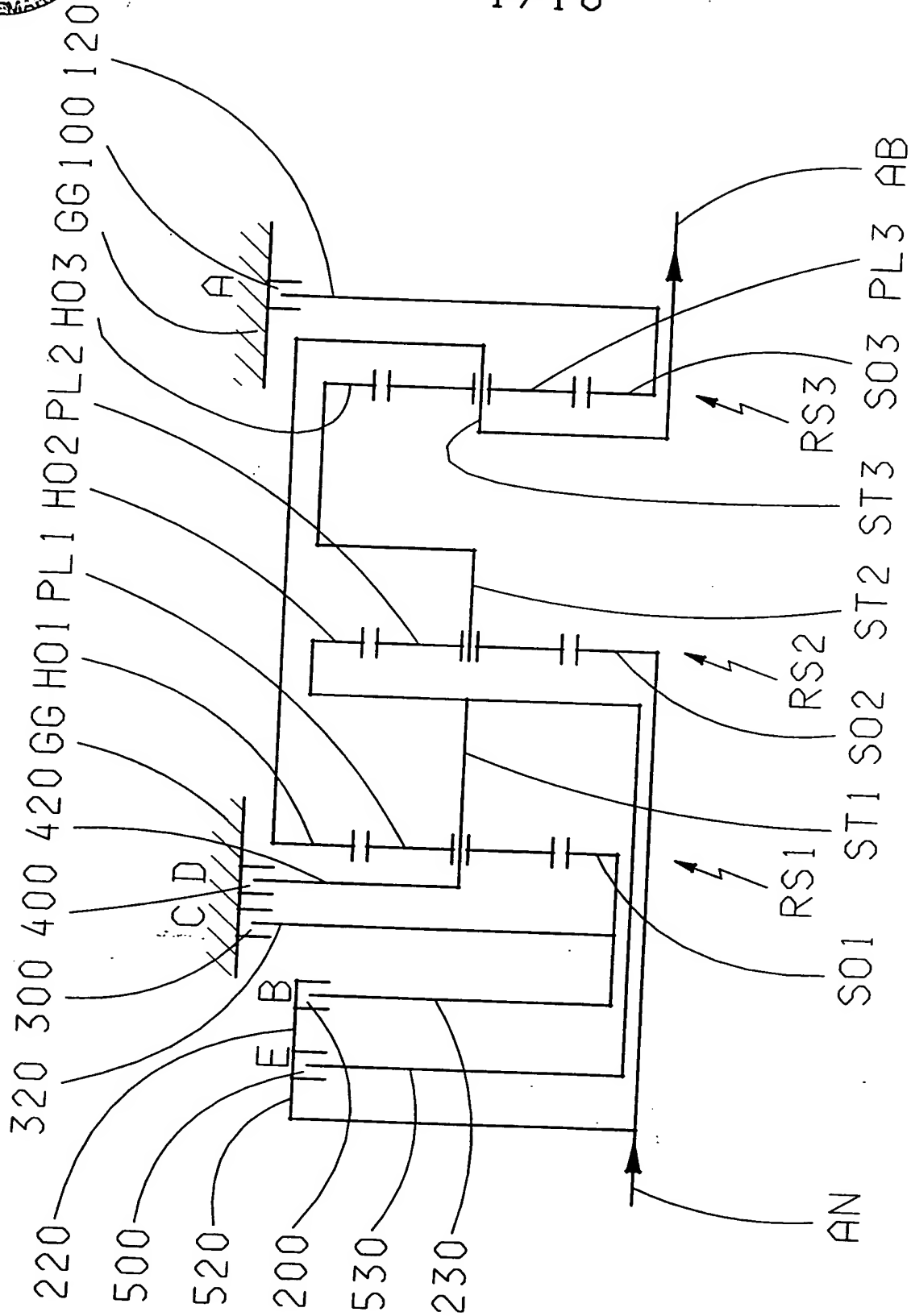


Fig. 1  
~~(ST. 11)~~  
PRIOR ART





2/10

<del>Gang</del> <del>gear</del>	<del>geschlossene Schaltelemente</del> <del>closed shifting elements</del>				
	A	B	C	D	E
1	●			●	
2	●		●		
3	●	●			
4	●				●
5		●			●
6			●		●
R		●		●	

Fig. 2

~~(Std. d. T.)~~

PRIOR ART